

produce eczematous eruptions on the hands, and that, conversely, contact-type eczematous eruptions of the hands occasionally produce vesicular eruptions of the feet." Incidentally, physicians suffering from an eczematous dermatitis of the hands and feet are occasionally subjected to futile treatment for dermatophytosis when actually suffering from surgical glove dermatitis and rubber dermatitis of the feet. The physician may have accepted a negative test patch to rubber performed on the arm or on another site distant from the hands, forgetting that the sensitivity to the rubber glove may have been strictly localized to the hands. Sensitivity to rubber gloves should not be ruled out until patch tests have been performed on the back of the hands. The best way to do this is to have the physician wear the suspected rubber glove over a cotton or silk glove in which a small hole has been cut in the back. A positive diagnosis of rubber dermatitis of the feet is made by patch testing with pieces of leather or fabric with rubber cemented surfaces placed directly on the skin.

Treatment.—The treatment of the condition is obvious. Yet, it is difficult, especially for women, to buy shoes in which exposure to rubber can be eliminated. I have found it wise to refer the patient to a reputable shoe dealer who sells both factory and custom built shoes. He can often select a shoe in which there is no rubber in the uppers and replace the sock liner. This may suffice when there is but mild sensitivity. When a high degree of sensitivity is present, there is no recourse except to purchase custom built shoes in which all rubber has been eliminated.

SUMMARY

Sensitivity to rubber should be considered in looking for the cause of a dermatitis of the feet.
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REFERENCES

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2. Baer, R. L.: Sensitization, *New York State Jour. Med.*, 42:1531-1537 (Aug. 15), 1942.

DIABETIC COMA*

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AND

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WE wish to report a case of diabetic coma with recovery in which the blood sugar was unusually high, and in which an unusually large amount of fluid was administered parenterally without evidence of overloading the circulation.

The patient entered the hospital with an initial blood sugar level of 1,550 mgm. per cent. Joslin¹ reports 17 cases of diabetic coma in which the initial blood sugar was 1,000 mgm. per cent or

above. Of these 12 recovered and 5 died. The highest blood sugar with recovery was 1,680 mgm. per cent. He quotes Dillon and Dyer who reported 25 cases with an initial blood sugar of 1,000 mgm. per cent or more. Of these 9 recovered and 16 died. Recovery took place in a woman with a reading of 1,850. Lawrence reported a blood sugar of 2,060 mgm. per cent with fatal termination.

Within the past year, Greenberg and Rhodes² have reported a case in which the blood sugar rose to 1,600 mgm. per cent despite continuous insulin treatment. Following further intensive insulin therapy there was final recovery.

Recovery from diabetic coma with a blood sugar as high as 1,550 mgm. per cent is then relatively rare.

A further interesting observation in this case was that a total of 11,500 c.c. of intravenous fluid was given in a period of 24 hours without evidence of circulatory overloading. We feel that this amount of fluid was essential to correction of dehydration and to maintenance of the peripheral circulation, and that it was life-saving. In this period 495 units of insulin were given. The total urinary output by catheter in this period was only a few hundred c.c.

Justification of the use of such large amounts of fluid in the circulatory collapse and dehydration of diabetic coma would seem to come from Joslin's report of an "exceptional case" in which recovery followed the administration of 11 liters of liquid in 12 hours (by mouth and parenterally) without any hint of circulatory failure.

Campbell, Reeser, and Kepler are reported to have given a patient 9,875 c.c. of fluid in 12 hours. Root and Riseman gave one patient 13,800 c.c. and another 11,600 c.c. in the first 29 hours of treatment without sign of cardiac failure.

REPORT OF CASE

Mr. A. B., age 60, was admitted to the Santa Barbara Cottage Hospital 7-31-42, at 3:30 P.M., in severe diabetic acidosis. He was not responsive, but did not appear deeply comatose. Admission blood sugar was 1,550 mgm. per cent, CO₂ combining power was 11 volumes per cent, red count was 4,320,000, white count 15,850 with 86 per cent polys, urine sugar was 4+, acetone 1+. No diacetic acid was reported. Blood pressure was 70/30. There was Kussmaul type of respiration. Dehydration was profound. The tongue had an appearance of old, hard leather.

In the subsequent 24 hours there were administered intravenously the following fluids: 3,000 c.c. Ringer's lactose, 5,000 c.c. normal saline, 2,000 c.c. 5 per cent glucose in distilled water, 1,000 c.c. 10 per cent glucose in distilled water, and 500 c.c. of blood plasma. Four hundred ninety-five units of insulin were given. One thousand two hundred fifty c.c. of fluid were retained by mouth.

On the second day the red count fell to 2,940,000 and the white count to 5,900 with 82 per cent polys. The blood sugar fell steadily to 249 the second day with a CO₂ of 44. The NPN rose to 90.

Further recovery was uneventful. Unfortunately this patient died of diabetic gangrene on a subsequent readmission.

* From the Sansum Clinic, Santa Barbara.

We feel that it should be once again emphasized that death in diabetic coma comes from shock, ordinarily. Death may occur while the blood sugar and CO₂ combining power are both normal. We agree with Wiesel and Cohn and Schecter³ that adequate volumes of osmotically active solutions such as plasma should be given early and should be continued until blood flow and blood pressure are increased to normal and maintained. We also agree that prompt restoration of blood volume is almost as important as insulin and that, even though lack of insulin be the initiating factor in the series of events leading to the development of diabetic acidosis with peripheral circulatory failure, in treatment measures directed toward restoration of blood volume and adequate circulation should be instituted before, or simultaneous with, administration of insulin.

Our patient was given 500 c.c. of human plasma when, after twelve hours of intensive therapy, the blood pressure remained 60/30 and death appeared imminent.

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REFERENCES

1. "Treatment of Diabetes Mellitus," Elliott P. Joslin—Lea and Febiger (Seventh Edition).
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3. "Peripheral Circulatory Failure in Diabetic Acidosis and Its Relation to Treatment," Schecter, A. E., Wiesel, B. H., Cohn, C., *American Journal of the Medical Sciences* (Sept.), 1941.

CALIFORNIA INDUSTRIAL ACCIDENT FEE SCHEDULE*

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IN view of the necessity of conserving time at this session, I would merely refer to our report for the year printed in the "Pre-Convention Bulletin" of the April issue of CALIFORNIA AND WESTERN MEDICINE, were it not for the fact that there is one item,—the fee schedule of the Industrial Accident Commission, that is of such importance as to demand a brief supplement. . . .

The fee schedule, as enforced today, was adopted by the Industrial Accident Commission in 1920 and became effective the first of June of that year, 24 years ago. It was a poor type of schedule, listing only 87 procedures and operations as against 543 procedures and operations falling within the jurisdiction of compensation, being the fee schedule adopted in 1913, nearly 30 years ago, with a 25 per cent raise in 1920, 24 years ago. The costs of physicians' instruments and appliances, rents and assistants, secretarial help and his education were far less then than they are today. Benefits under the Compensation

Act were also very much lower than they are today. Medical practice has made great advances in these 24 years.

The Association's application for a fair, adequate and compensatory fee schedule, covering the 543 operations and procedures embraced within this practice, was presented to the Commission during a public hearing on February 15, 1943, over 14 months ago. Under the direction of the previous Commission it had been reviewed by Dr. Harbaugh, Medical Director of the Commission, and it was presented with his approval. Later, the Commission, in a letter to Dr. Gilman, Chairman of the Council of the Association, said:

"If you could, as Chairman of the Council of the California Medical Association, undertake some fundamental and long-range program whereby uniform rates of medical fees are demanded and adhered to by the medical profession, with the necessary machinery for disciplinary action for infraction, etc., I feel that progress could be made, and our objections (to granting the application) may be largely overcome."

As set forth in our report, a canvas of the entire membership was undertaken by the Council. Between 75 and 80 per cent of the members, as well as non-member, practicing physicians, signed pledge-cards agreeing to adhere to the fee schedule as fixed by the Commission and to the ethics prescribed for this practice. At the close of last year, Dr. Gilman was able to notify the Commission that Mr. Scharrenberg's suggestion had been carried out.

Later, and since our report was submitted for publication in the "Bulletin," the Commission has appointed a committee consisting of physicians to examine the fee schedule, and to satisfy them on the attitude of the profession in the matter of enforcement of the rates established by self-discipline within the ranks. We know that the report of this committee made some weeks ago to the Commission was a favorable one. The Medical Advisory Committee of the Bureau of Vocational Rehabilitation of the Department of Education, we are reliably informed, is favorably considering the recommendation of the adoption of the schedule proposed for compensation work as the schedule of that Bureau. On March 28th last, Dr. Gilman wrote the Commission, requesting a decision so that such a decision could be reported to the members at this session. Dr. Gilman said:

"I need not review the various steps that have been taken by the Association either voluntarily or at your request since this application was filed. The records are clear on all of these points, and it is our sincere belief that we have taken all steps necessary to merit the favorable consideration by your Honorable Commission on our application.

"May I again request that your Honorable Commission come to a decision in the near future on the requested schedule of fees so that a decision may be reported to our annual session?"

* Address of Hartley F. Peart, Legal Counsel of California Medical Association, to C.M.A. House of Delegates, May 7, 1944, at Los Angeles. See also report in Pre-Convention Bulletin, CALIFORNIA AND WESTERN MEDICINE, for April, 1944, on page 166.